

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS PUSHBUTTONS, AND SIGNS AT THE INTERSECTION OF MD 144 AND FRANKLIN ST. IN FREDERICK COUNTY. MD 144 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR-PHASE FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR WEST BOUND MD 144, AN ALTERNATE PEDESTRIAN PHASE FOR THE WEST LEG OF THE INTERSECTION AND A RIGHT TURN OVERLAP FOR NORTHBOUND FRANKLIN STREET

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. AN APS CENTRAL CONTROL UNIT WILL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY THE SHA.

SPECIAL NOTE

APS WILL FUNCTION AS FOLLOWS:

TO CROSS PATRICK STREET:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS PATRICK AT FRANKLIN."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS FRANKLIN STREET:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS FRANKLIN AT PATRICK."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301)624-8140

MS. ANDREA ABEND
UTILITY ENGINEER
PHONE: (301)624-8115

MR. RAYMOND JOHNSON
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301)624-8105

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
DIVISION
PHONE: (410)787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF
TRAFFIC OPERATIONS
(410)787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
(410)787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
(410)787-7676

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.
NONE

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1001	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH	LF	245
2002	TEST PIT EXCAVATION	CY	2
5005	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	250
8001	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON	EA	4
8003	FURNISH AND INSTALL 2 WIRE CONTROL UNIT	EA	1
8004	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	4
8005	PEDESTRIAN EDUCATION SIGN 4-R10-3(1) MOD (9"x15")	EA	4
8007	REMOVE AND DISPOSE PER ASSIGNMENT	EA	1
8011	ADJUST EXISTING HANDHOLE	EA	1
8012	NO. 6 STRANDED BARE COPPER GROUND WIRE	LF	70
8013	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	70
8020	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	380
8021	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	560
NEG	CITY OF FREDERICK STYLE BROWN BREAKAWAY PEDESTAL POLE WITH TRANSFORMER BASE AND FOUNDATION	EA	3

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA.

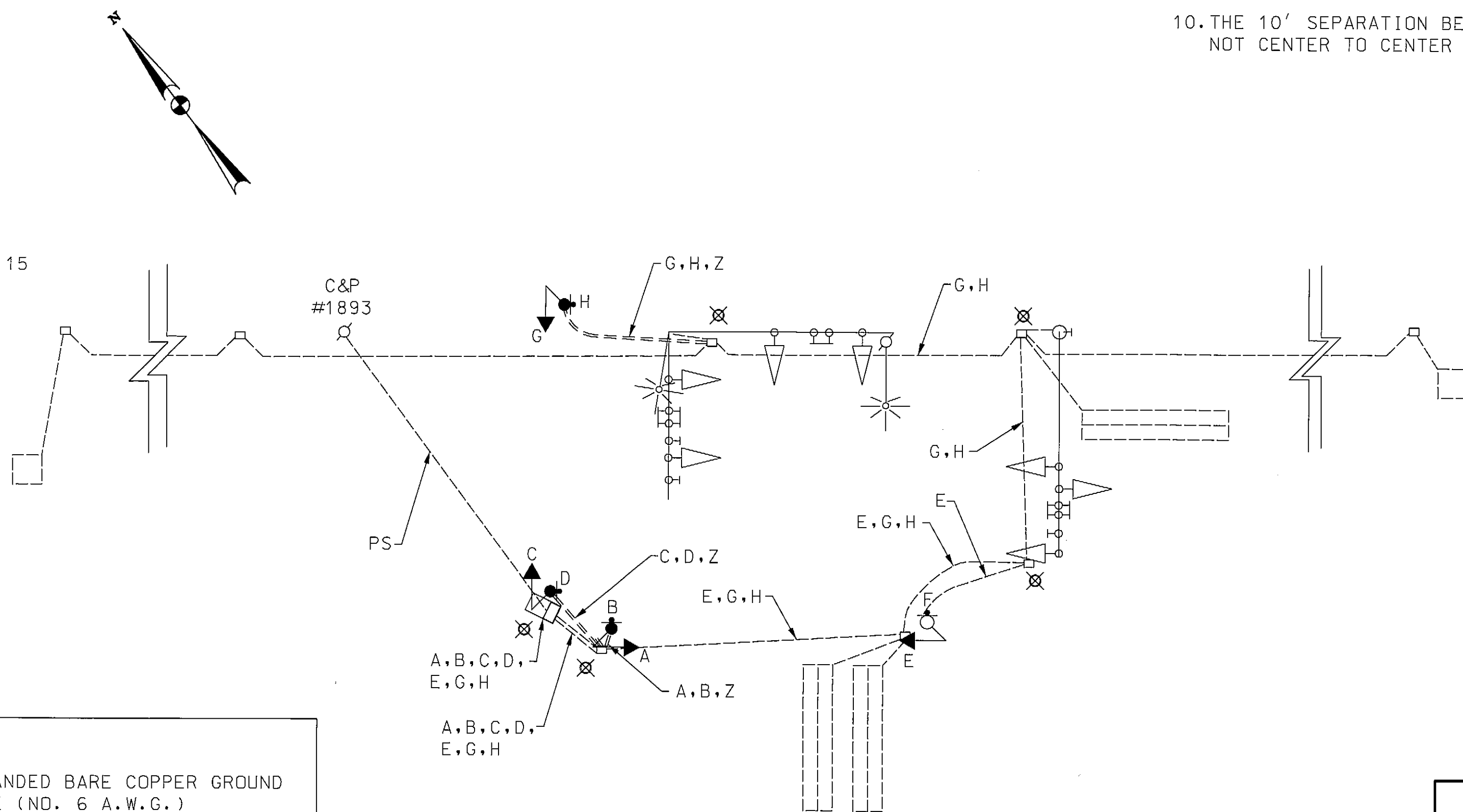
ALL MATERIALS AND EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASING CHART

NO PHASE CHANGE

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
4. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
5. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK GRADE.
6. ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7652 TO COORDINATE.
7. LOCATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET THE LOCATION REQUIREMENTS OF THE MUTCD, SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
8. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM 60"x60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN 2%.
9. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA, DOES NOT HAVE TO REACH MORE THAN 18".
10. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.



WIRING KEY

A,C,E,G	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
B,D,H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	PS	POWER SOURCE
F	USE EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	⊗	EXISTING GROUND ROD

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 144 @ FRANKLIN ROAD
FREDERICK, MARYLAND

REVISIONS

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	FEBRUARY 2010	CONTRACT NO.	AX7065168
DESIGNED BY	AMR	COUNTY	FREDERICK		
DRAWN BY	AMR	LOGMILE	1001440.405		
CHECKED BY	BJG	TIMS NO.	K065		
FAP NO.		TOD NO.			
TS NO. 388/A-GI	DRAWING SG - 2 OF 2	SHEET NO.	2 OF 2		



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